

AMENDMENTS TO THE SPECIFICATION:

Delete the last paragraph on page 3, and replace it with the following paragraph:

The basic idea of the invention is the recognition that the implementation of the measures described herein will result in a system which is more advantageous than previous greywater recycling systems.

Delete the paragraph bridging pages 4-5, and replace it with the following paragraph:

The greywater recycling system as per the present invention has numerous advantages. Its operation is fully automatic, and thus needs no human intervention whatsoever. In case the large combined tank is overfilled, the greywater surplus flows automatically to the toilet bowl through the overflow tube. When there is not enough greywater for one flushing, the system provides fresh water supply automatically. It operates with pumps as well. Therefore, it is not absolutely necessary to base its operation on gravity free-flow due to dwelling floor differences. It makes use only of the greywater originating within one and the same household. The water pumps are located in a safe place inside the washing machine, and thus no additional power supply is needed. The system is simple to install, and it is economical to manufacture since the majority of parts used to make it are well known.

Delete the last full paragraph on page 5, and replace it with the following paragraph:

Figure 1 shows the tank (1), the greywater valve (2), the water supply pipe (3), the fill valve (4), the shut-off valve (5), the floating ball (6), the flushing valve (7), the flushing conduit (8), the overflow orifice (9), the overflow tube (10), the filtering units (13), the disinfecting unit (14), the actuating shaft (15), the pivoted support arm (16), the compensating air orifice (17), the stopping member (18), and the greywater pipe (19).

Delete the paragraph bridging pages 5-6, and replace it with the following paragraph:

The tank (1) can have various dimension, the 100 litre size is advantageous. The greywater arriving through the greywater tube (19) is directed through the filtering unit (13), consisting of a metal pre-filter screen and a finer filter. This filters out possible pieces of hair, and threads or fluff. The disinfecting unit (14) chlorinates the greywater. The treated greywater flows into the tank (1). Inasmuch as the water quantity exceeds the capacity of the tank (1), the greywater (11) surplus flows through the overflow orifice (9) and the overflow tube (10) and exits the tank through the flushing conduit (8). The diameter of the overflow tube (10) is identical to or greater than that of the greywater tube (19). When flushing, by opening the flushing valve (7) the quantity of water necessary for the flushing – about 6-7 litres – leaves the tank through the flushing valve (7) and the flushing conduit (8). The greywater (11) can mix with the supply water (12). If there is a sufficient quantity of greywater (11) present, the location of the floating ball (6) is fixed at the supply water level (20).

Delete the first full paragraph on page 6, and replace it with the following paragraph:

The floating ball (6) comes into action when the tank (1) does not contain greywater (11), or the water quantity in the tank (1) sinks below the level of about 6-7 litres determined by the stopping member (18). In such a case, the pivoted support arm (16) swings downward, and the actuating shaft (15) in turn opens the fill valve (4). Fresh supply water (12) flows into the tank (1) through the water supply pipe (3) and the fill valve (4). The inflowing supply water (12) pushes the floating valve (6) upwards, also moving upwards the actuating shaft (15), which closes the fill valve (4). At that moment, the floating ball (6) is at the supply water level (20). If after that greywater (11) flows into the tank, the floating ball (6) can no longer rise upwards, because it bumps into the stopping member (18), so it remains at the supply water level (20).

Delete the second full paragraph on page 6, and replace it with the following paragraph:

Limiting the upward movement of the floating ball (6) is also possible at the articulating joint where the pivoted support arm (16) is fixed to the tank (1). In this way, the supply water (12) can flow into the tank (1) only when the water quantity in the tank (1) is below the volume sufficient for one flushing. In the tank (1), the atmospheric pressure and the steady flowing out of the flushing volume is ensured by the compensating air orifice (17).

Delete the third full paragraph on page 6, and replace it with the following paragraph:

Figure 2 shows the tanks (1), the primary water pump (21), the bath tub (22), the supply pipe connection (23), the solenoid valve (24), the water supply connection (25), the outflow orifice (26), the primary greywater drain pipe (27), the washing space connecting duct (28), the washing space connection (29), the washing machine (30), the secondary greywater drain pipe (35), the water sensor (36), the washing space (37), and the non-return valve (38). Figure 2 shows two tanks (1), but the number of tanks can be one or more. In case of one tank, the primary greywater drain pipe (27) and the secondary greywater drain pipe (35) can be connected.

Delete the paragraph bridging pages 6-7, and replace it with the following paragraph:

The primary water pump (21) is the original water pump of the washing machine (30). It is required that the power and the lifting height of the primary water pump (21) is increased to exceed those of the pump types presently used in washing machines, as a function of the dwelling floor difference and the distance to the tank (1). The power of the electric centrifugal pumps most widely used in washing machines is about 100 W. The increased power of the primary water pump (21) is between 100 and 400 W, preferably 200 W, and its increased water pressure is between 0.4 and 1.0 bar. The secondary water pump (31) incorporated into the washing machine (30) is preferably in the upper segment of the above mentioned power range, preferably 400 W, and its water pressure is between 0.5 and 1 bar. Its power supply is ensured by

the power supply of the washing machine (30), such that it works automatically, and it is completely independent of all the original functions of the washing machine (30).

Delete the first full paragraph on page 7, and replace it with the following paragraph:

The secondary water pump (31) is activated by the water sensor (36) – that can be enabled/disabled by a separate switch – and it comes into action when water arrives and is sensed in the greywater suction pipe (32). The water sensor (36) is optimally located between the secondary water pump (31) and the suction pipe connection (33). The non-return valves (38) prevent backflow of the greywater. The greywater from the washing machine (30) is pumped through the washing space connection (29), the washing space connecting duct (28), the primary water pump (21), the outflow orifice (26), the non-return valve (38), and the primary greywater drain pipe (27) to the tank (1). The water supply of the washing machine (30) is also indicated, through the supply pipe connection (23), the water supply connection (25), and the solenoid valve (24). The greywater from the bath tub (22) is drained through the greywater suction pipe (32), the suction pipe connection (33), the water sensor (36), the drain orifice (34), the non-return valve (38), and the secondary greywater drain pipe (35) into the tank (1).

Delete the last full paragraph on page 7, and replace it with the following paragraph:

Under the protection of the patent, other versions of the present system are also possible. As an example, the flushing valve (7) can be mounted on the flushing conduit (8) in a WC on a different floor, and not on the lower part of the tank (1), which tank (1) may be located in the attic. The greywater recycling system of the present invention provides a solution primarily for the automatic recycling of greywater originating in households from washing machines and bath tubs, by reusing the greywater for flushing the toilet.